

Claims

What is claimed is:

1. A support arm for use in a respiratory circuit, comprising:

a plurality of arm segments movably connected with one another such that said arm segments are adjustable with respect to one another;

at least one inflatable bladder operably disposed at a point of connection

between at least two of said arm segments, wherein upon inflation of said bladder said arm segments are locked into position with respect to one another and upon deflation said arm segments are released and positionable with respect to one another; and

a respiratory support member attached to one of said arm segments, said respiratory support member configured for engaging a component of the respiratory circuit to support the respiratory circuit.

2. The support arm of claim 1, wherein said bladder is configured at a point of connection between all of said arm segments.

3. The support arm of claim 2, wherein said bladder is a tube that extends through all of said arm segments.

4. The support arm of claim 1, wherein said bladder is within at least one of said arm segments.

5. The support arm of claim 4, wherein said bladder traverses the point of connection between all of said arm segments.
6. The support arm of claim 1, wherein:
at least one of said arm segments has a flexible section; and
further comprising at least one said inflatable bladder located in said flexible section of said arm segment and is inflatable to rigidify said flexible section.
7. The support arm of claim 1, wherein at least one of said arm segments is adjustably mounted to a ventilator unit.
8. The support arm of claim 1, wherein said bladder is inflated and deflated by activation of at least one control member, said at least one control member located on said arm segment and proximate to said respiratory support member.
9. The support arm of claim 1, wherein the inflation of said bladder hinders the adjustment between all of said arm segments, deflation of said bladder permits adjustment between all of said arm segments.
10. The support arm of claim 1, wherein said arm segments are adjustable and said bladder is inflatable and deflatable by a user employing only one hand.

11. The support arm of claim 1, wherein only one bladder is present.
12. The support arm of claim 1, wherein said respiratory support member has at least two sections being movable with respect to one another, wherein inflation of said bladder urges against one of said sections and causes both of said sections to be fixed with respect on one another.
13. The support arm of claim 6, wherein:
said arm segments are three in number and are movably connected with one another by swivel joints; and
said flexible section of said arm segment is a corrugated tube.
14. The support arm of claim 6, wherein:
said arm segments are four in number and are movably connected with one another by swivel joints; and
said flexible section of said arm segment is a corrugated tube.
15. The support arm of claim 1, wherein said arm segments are movably connected with one another by swivel joints, said swivel joints having a snap ring configuration, said snap ring configuration is disengaged during deflation of said bladder and allows

said swivel joint to move freely, inflation of said bladder engages said snap ring
 5 configuration and locks said swivel joint.

16. A support arm for use with a respiratory circuit, comprising:

a plurality of arm segments, at least one of said arm segments being a rigid
 member and at least one of said arm segments having a flexible section, said arm
 segments being connected to one another by swivel joints to allow said arm segments
 5 to swivel with respect to one another;

a bladder located inside of said arm segments, said bladder being continuous
 through said arm segments, said bladder being inflatable to effect a locking of said arm
 segments with respect to one another;

a respiratory support member attached to one of said arm segments and
 10 adjustable with respect to said arm segment, wherein inflation of said bladder causes a
 locking of said respiratory support member preventing adjustment of said respiratory
 support member with respect to said arm segment, said respiratory support member
 configured for engagement with a respiratory circuit.

17. The support arm for use with a respiratory circuit of claim 16, wherein said
 support arm has three arm segments, two of said arm segments are rigid and one of
 said arm segments has a flexible section, said respiratory support member being
 attached to said arm segment having a flexible section.

18. The support arm for use with a respiratory circuit of claim 16, wherein one of said arm segments has a control member attached thereon, said control member is located proximate to said respiratory support member, activation of said control member causes deflation of said bladder and unlocking of said arm segments to allow a user to manipulate said arm segments.

19. The support arm for use with a respiratory circuit of claim 16, wherein said respiratory support member has a ball and socket connection for effecting adjustment of said respiratory support member in relation to said arm segment.

20. The support arm for use with a respiratory circuit of claim 16, wherein one of said arm segments is adjustably connected to a ventilator, and said bladder is inflated with gas from the ventilator.

21. The support arm for use with a respiratory circuit of claim 20, wherein said bladder is inflated with gas from a compressor line of the ventilator.

22. The support arm for use with a respiratory circuit of claim 18, wherein said control member has an inflation button for inflation of said bladder to effect locking of said arm segments, and said control member has a deflation button for deflation of said bladder to effect unlocking of said arm segments.

23. The support arm for use with a respiratory circuit of claim 19, wherein said respiratory support member has a respiratory support adjustment handle for use in combination with said bladder to effect a locking and unlocking of said respiratory support member with respect to said arm segment.
24. The support arm for use with a respiratory circuit of claim 16, wherein one of said arm segments is adjustably connected to a ventilator by a ventilator connection adjustment handle, said ventilator connection adjustment handle allowing for adjustment of said arm segment on the ventilator.
25. The support arm for use with a respiratory circuit of claim 16, wherein said flexible section of said arm segment is a corrugated section of interconnected members.
26. The support arm for use with a respiratory circuit of claim 16, wherein said support arm has four arm segments, three of said arm segments are rigid and one of said arm segments has a flexible section, said respiratory support member being attached to said arm segment having a flexible section.
27. The support arm of claim 16, wherein said swivel joints have a snap ring configuration, said snap ring configuration is disengaged during deflation of said bladder and allows said swivel joint to move freely, inflation of said bladder engages said snap ring configuration and locks said swivel joint.

28. A support arm for use with a respiratory support circuit, comprising:

three arm segments, two of said arm segments being a rigid member, the other of said arm segments having a flexible section, one of said rigid arm segments being adjustably connected on one end thereof to a ventilator, said two rigid arm segments being adjustably connected to one another by a first swivel joint, one of said rigid arm segments and said arm segment having said flexible section being adjustably connected to one another by a second swivel joint, said flexible section being formed by a corrugated member;

a respiratory support member connected to said arm segment having said flexible section, said respiratory support member having one end configured for engagement with a tube of a respiratory circuit to support the tube, said respiratory support member having a pivot connection therein to allow for adjustment of said respiratory support member; and

a flexible bladder disposed through said arm segments, inflation of said flexible bladder effects a locking of said swivel joints and said flexible section to effect a locking of said arm segments and prevent relative motion between said arm segments, inflation of said bladder effects a locking of said pivot connection of said respiratory support member to prevent adjustment of said respiratory support member.